WE CLAIM:

1. A system for providing proximity-based registration on a data network, wherein the data network provides data connectivity for a plurality of data communications channels using data transport protocols, the system comprising in combination:

a plurality of data network appliances linked to the data network, each data network appliance operable to communicate a voice signal as voice-over-data packets on a voice-over-data channel, the voice over data channel being one of the plurality of data communications channels on the data network, the data network appliances each operable to convert voice-over-data packets communicated on the voice-over-data channel to voice signals, the data network appliances each operable to detect an announcement message wirelessly transmitted by a portable information device associated with a user, the announcement message including at least one user attribute, the data network appliances each operable to transmit a registration request onto the data network responsive to detecting the announcement message; and

a registration server linked to the data network, the registration server operable to receive the registration request and register the user to at least one of the plurality of data network appliances.

2. The system of Claim 1, wherein each of the plurality of data network appliances is operable to periodically transmit a ping message, wherein the announcement message is transmitted by the portable information device responsive to the portable information device receiving the ping message.

3. The system of Claim 2, wherein each of the plurality of data network appliances is operable to transmit an acknowledgement message to the portable information device in response to detecting the announcement message.

4. The system of Claim 1, wherein each of the plurality of data network appliances includes a respective device identifier, and wherein the registration server maintains a

registration database including the device identifiers for the plurality of data network appliances.

5. The system of Claim 4, wherein the device identifiers are Internet Protocol (IP) addresses.

6. The system of Claim 4, wherein the device identifiers are Session Initiation Protocol addresses.

7. The system of Claim 1, wherein a user identifier is associated with the user, and wherein the at least on user attribute includes the user identifier.

8. The system of Claim 7, wherein the user identifier is a SIP URI.

9. The system of Claim 1, wherein the registration request is a message defined in a call-management protocol selected from the group consisting of the Session Initiation Protocol (SIP), the H.323 Protocol, the MEGACO protocol, and the MGCP protocol.

10. A system for providing proximity-based registration on a data network, wherein the data network provides data connectivity for a plurality of data communications channels using data transport protocols, the system comprising in combination:

a portable information device associated with a user, wherein the portable information device includes a user attribute database containing at least one user attribute, wherein the portable information device is operable to wirelessly transmit an announcement message, and wherein the announcement message includes the at least one user attribute;

a voice communication device connected to the data network, wherein the voice communication device includes a user interface for accepting user inputs and delivering user outputs, wherein the voice communication device is operable to transmit a registration request onto the data network upon detecting the announcement message transmitted by the portable information device, and

wherein the registration request includes the at least one user attribute and at least one voice communication device attribute; and

a registration server connected to the data network, wherein the registration server is operable to register the user to the voice communication device in a registration database upon receiving the registration request from the voice communication device, thereby enabling the user to communicate from the voice communication device with a communication partner located on the data network.

11. The system of Claim 10, wherein the registration server processes a call addressed to the user by referencing the registration database and directing the call to the voice communication device.

12. The system of Claim 10, further comprising a gateway to a public switched telephone network.

13. The system of Claim 10, further comprising a router to a public internet.

14. The system of Claim 12, wherein the gateway includes a SIP client, the voice communication device is a SIP phone, the registration server is a SIP server, and the registration database is a SIP database.

15. The system of Claim 13, wherein the router includes a SIP client, the voice communication device is a SIP phone, the registration server is a SIP server, and the registration database is a SIP database.

16. A system for registering a user to a proximate data network appliance in a data network telephony system, comprising:

a passive portable information device containing a user attribute stored therein;

a data network appliance operative to read the user attribute from the passive portable information device when the passive portable information device is placed within a proximity range of the data network appliance, wherein the data network appliance includes a network interface enabling the data network appliance to transmit a registration request to a registration server located on a data network, thereby registering the user of the passive portable information device to the data network appliance.

17. The system of Claim 16, wherein the data network appliance is further operative to access a database to obtain registration attributes corresponding to the user attribute, and wherein at least one of the registration attributes are included within the registration request transmitted to the registration server.

18. The system of Claim 17, wherein the database is a located on the data network and is accessed by the data network appliance via the data network.

19. A data network appliance, comprising in combination:

a proximity receiver operable to detect an announcement message transmitted by a portable information device, wherein the proximity receiver is detached from the portable information device;

an audio input interface operable to receive an audio input signal from a user;

an audio output interface operable to transmit an audio output signal to the user;

a voice-over-data module operable to convert the audio input signal into a digital audio transmit stream, and wherein the voice-over-data module is operable to convert a digital audio receive stream into the audio output signal;

an interface to a data network, wherein the data network provides data connectivity for a plurality of data communications channels using data transport protocols, wherein at least one of the plurality of data communications channels is operable to support the digital transmit stream and the digital receive stream, and

wherein the data network links the data network appliance to a registration server; and

a registration module operable to transmit a registration request to the registration server responsive to the proximity receiver detecting the announcement message.

20. The data network appliance of Claim 19, wherein the proximity receiver is an infrared receiver.

21. The data network appliance of Claim 19, wherein the proximity receiver is a radio frequency receiver.

22. The data network appliance of Claim 19, wherein the proximity receiver operates according to the Bluetooth specification.

23. The data network appliance of Claim 19, wherein the audio input signals and audio output signals are voice signals.

24. The data network appliance of Claim 19, wherein the voice-over-data module is an application executable by the processor.

25. The data network appliance of Claim 19, further comprising a proximity transmitter.

26. The data network appliance of Claim 19, further comprising:

a video input interface operable to receive a video input signal from the user;

a video output interface operable to transmit a video output signal to the user; and

a video-over-data module operable to convert the video input signal into a digital video transmit stream, and wherein the video-over-data module is operable to convert a digital video receive stream into the video output signal.

27. The data network appliance of Claim 26, wherein the video-over-data module is integral with the voice-over-data module, and wherein the digital audio transmit stream and the digital video transmit stream compose a digital A/V transmit stream.

28. The data network appliance of Claim 19, wherein the announcement message includes at least one user attribute, and wherein the registration request includes the at least one user attribute.

29. The data network appliance of Claim 19, wherein the data network appliance determines whether the user is already registered to the data network appliance, and if so, does not transmit the registration request.

30. The data network appliance of Claim 19, wherein the announcement message is validated prior to the registration module transmitting the registration request to the registration server.

31. The data network appliance of Claim 28, further comprising a memory, wherein the at least one user attribute is stored in the memory responsive to the registration module transmitting a corresponding registration request to the registration server.

32. The data network appliance of Claim 19, wherein the proximity receiver detects the announcement message including an associated user attribute, and wherein the registration module only transmits a registration request corresponding to the announcement message if the memory does not previously contain the associated user attribute.

33. The data network appliance of Claim 19, further comprising a proximity transmitter operable to periodically transmit a ping message, wherein the announcement message is transmitted by the portable information device responsive to the portable information device receiving the ping message.

34. The data network appliance of Claim 19, further comprising a proximity transmitter operable to transmit an acknowledgement message in response to the proximity receiver detecting the announcement message.

35. The data network appliance of Claim 34, wherein the proximity transmitter additionally transmits an acknowledgement message in response to the proximity receiver detecting the announcement message.

36. The data network appliance of Claim 34, wherein the proximity receiver and the proximity transmitter are radio frequency devices.

37. The data network appliance of Claim 34, wherein the proximity receiver and the proximity transmitter operate according to the Bluetooth specification.

38. The data network appliance of Claim 19, wherein the proximity receiver is a magnetic field device.

39. The data network appliance of Claim 34, wherein the proximity receiver and the proximity transmitter are infrared devices operating according to the IRDA specification

40. The data network appliance of Claim 34, wherein the proximity receiver and the proximity transmitter respectively receive and transmit audible signals.

41. The data network appliance of Claim 34, wherein the proximity receiver and the proximity transmitter respectively receive and transmit inaudible signals.

42. The data network appliance of Claim 34, wherein the proximity receiver and the proximity transmitter respectively receive and transmit visible signals.

43. The data network appliance of Claim 34, wherein the proximity receiver and the proximity transmitter respectively receive and transmit non-visible signals.

44. The data network appliance of Claim 19, wherein the registration request is in accordance with the Session Initiation Protocol (SIP).

45. The data network appliance of Claim 19, wherein the registration request is in accordance with the H.323 Protocol.

46. The data network appliance of Claim 19, wherein the registration request is in accordance with the MEGACO protocol.

47. The data network appliance of Claim 19, wherein the registration request is in accordance with the MGCP protocol.

48. The data network appliance of Claim 19, wherein the portable information device is a device selected from the group consisting of a personal digital assistant, a portable computer, a smart card, a portable phone, a two-way radio, an identification badge, and an electronic transaction card.

49. A portable information device for registering a user to a data network appliance, comprising in combination:

a memory containing a user attribute database, the user attribute database configurable to store at least one user attribute corresponding to a user of the portable information device; and

a proximity transmitter operable to transmit an announcement message to at least one data network appliance, the announcement message including the at least one user attribute, the announcement message enabling the at least one data network appliance to register the user to the at least one data network appliance.

50. The portable information device of Claim 49, wherein the proximity transmitter transmits the announcement message at a periodic transmit interval.

51. The portable information device of Claim 49, further comprising a proximity receiver, wherein the proximity receiver is operable to detect a ping message transmitted by a proximate data network appliance, and wherein the proximity transmitter transmits the announcement message in response to the proximity receiver receiving the ping message.

52. The portable information device of Claim 49, further comprising a proximity receiver, wherein the proximity receiver is operable to detect an acknowledgement message transmitted by a proximate data network appliance.

53. The portable information device of Claim 52, wherein the acknowledgement message includes at least one appliance attribute corresponding to the proximate data network appliance, and wherein the appliance attribute is stored in the memory.

54. The portable information device of Claim 51, wherein the ping message includes at least one appliance attribute corresponding to the proximate data network appliance, wherein the appliance attribute is stored in the memory, and wherein the proximity transmitter only transmits the announcement message if the appliance attribute is not already contained in the memory.

55. The portable information device of Claim 49, further comprising a proximity receiver, wherein the proximity receiver is operable to detect a first ping message transmitted by a first proximate data network appliance and a second ping message transmitted by a second proximate data network appliance, wherein the first ping message is detected prior to the second ping message, wherein the first ping message and the second ping message each contain at least one appliance attribute, wherein the proximity transmitter transmits the announcement message in response to the proximity receiver receiving the first ping message, and wherein the announcement message indicates to which of the first proximate data network appliance and the second proximate data network appliance the announcement message is destined, thereby enabling registration of the user to either of the first proximate data network appliance or the second proximate data network appliance.

56. The portable information device of Claim 49, further comprising a proximity receiver, wherein the proximity receiver is operable to detect a first ping message transmitted by a first proximate data network appliance and a second ping message transmitted by a second proximate data network appliance, and wherein the proximity transmitter transmits the announcement message to the first and second proximity data network appliances, thereby enabling registration of the user to both of the first proximate data network appliance and the second proximate data network appliance.

57. The portable information device of Claim 49, wherein the proximity transmitter is a radio frequency device.

58. The portable information device of Claim 49, wherein the proximity transmitter operates according to the Bluetooth specification.

59. The portable information device of Claim 49, wherein the proximity transmitter is a magnetic field device.

60. The portable information device of Claim 49, wherein the proximity transmitter is an infrared device operating according to the IRDA specification.

61. The portable information device of Claim 49, wherein the proximity transmitter transmits audible signals.

62. The portable information device of Claim 49, wherein the proximity transmitter transmits inaudible signals.

63. The portable information device of Claim 49, wherein the proximity transmitter transmits visible signals.

64. The portable information device of Claim 49, wherein the proximity transmitter transmits non-visible signals.

65. The portable information device of Claim 49, wherein the data network appliance is a device selected from the group consisting of a data network telephone, a personal computer, an Internet appliance, a voice communication device, and a videophone.

66. A method for registering a user of a portable information device to a data network appliance, comprising in combination:

wirelessly transmitting a ping message from the data network appliance;

determining whether an announcement message has been detected from a portable information device; and

transmitting a registration request across a data network to a registration server upon determining that the announcement message has been detected from the portable information device.

67. The method of Claim 66, further comprising repeating the step of wirelessly transmitting the ping message from the data network appliance while the announcement message has not yet been detected.

68. The method of Claim 66, wherein the step of transmitting a registration request comprises:

formatting the registration request using at least one user attribute included within the announcement message;

transmitting the registration request across the data network to the registration server;

receiving a confirmation message across the data network from the registration server; and

wirelessly transmitting an acknowledgement message to the proximate portable information device.

69. A method for providing proximity registration at a data network appliance, comprising in combination:

listening for an announcement message wirelessly transmitted by a proximate portable information device; and

transmitting a registration request across a data network to a registration server upon detecting the announcement message.

70. The method of Claim 69, wherein the step of transmitting a registration request comprises:

formatting the registration request using at least one user attribute included within the announcement message;

transmitting the registration request across the data network to the registration server;

receiving a confirmation message across the data network from the registration server; and

wirelessly transmitting an acknowledgement message to the proximate portable information device.

71. A method for registering a user to a proximate data network appliance from a portable information device, comprising in combination:

listening for a ping message wirelessly transmitted by a data network appliance;

determining whether the ping message has been detected; and

wirelessly transmitting an announcement message to the data network appliance upon determining that the ping message has been detected.

72. A method for registering a user to a proximate data network appliance in a data network telephony system, comprising in combination:

wirelessly transmitting an announcement message from a portable information device associated with the user;

determining whether an acknowledgement message has been received from a data network appliance, wherein the acknowledgement message indicates that the user has been successfully registered to the data network appliance; and

notifying the user that the user has been successfully registered to the data network appliance upon determining that the acknowledgement message has been received.

73. At a data network appliance on a data network telephony system, a method for providing proximity registration of a user to a data network appliance, wherein a passive portable information device is associated with the user, the method comprising in combination:

reading a user attribute from a proximate passive portable information device, wherein the proximate passive portable information device is located within a proximity range from the data network appliance; and

transmitting a registration request to a registration server, thereby registering the user of the proximate passive portable information device to the data network appliance.

74. The method of Claim 73, wherein the step of reading the user attribute further includes accessing a database to obtain at least one registration attribute corresponding to

the user attribute, and wherein the at least one registration attribute is used to format the registration request.

75. The method of Claim 73, wherein the passive portable information device is a security badge.